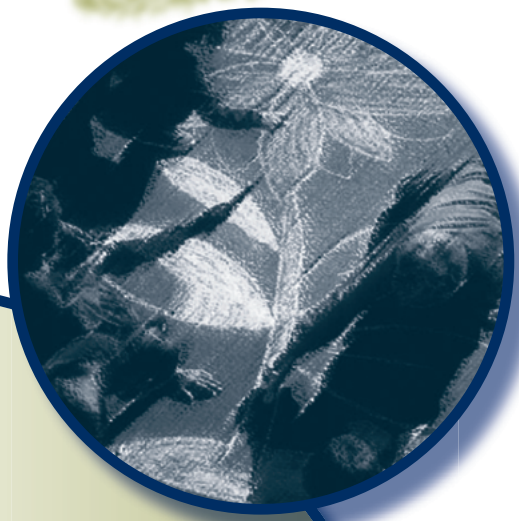
Child Deaths IN MICHIGAN



Michigan Child Death
State Advisory Team
Seventh Annual
EXECUTIVE REPORT

A Report on Reviews conducted in 2005-2006

A report on the causes and trends of child deaths in Michigan based on findings from community-based Child Death Review Teams. With recomendations for policy and practice to prevent child deaths.

The Michigan Department of Human Services
Michigan Public Health Institute

JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF HUMAN SERVICES
LANSING

ISMAEL AHMED
DIRECTOR

Winter 2009

The Honorable Jennifer M. Granholm, Governor
Honorable Members of the Michigan Legislature

I am submitting this seventh annual report of child deaths in Michigan, in accordance with Public Act 167 of 1997. In 2005-2006, nearly 1,200 community representatives in 68 counties met to conduct comprehensive reviews of 1,382 deaths. This report presents the findings from these review meetings.

In 2005-2006, 3,320 children under the age of 19 died in Michigan. While this number continues to fall each year, the local review teams believe that well over half of these deaths were preventable. These deaths could have been prevented through different actions by parents or other caregivers, less risky behaviors by adolescents and/or earlier intervention taken by public support systems.

In addition to the large number of preventable child deaths, wide disparities in race and income persist. African American children ages 0-18 died at a rate 2.4 times that of white children in 2005-2006, and the death rate for African American infants ages 0-1 was 3.3 times higher than that of white infants. Poor children are also more at risk.

Reducing preventable child deaths will require a combination of increased:
- education and information;
- community support structures; and,
- clarification and strengthening of certain laws and/or regulatory structures.

The Michigan Child Death State Advisory Team presents recommendations in this report based on their study of local review findings. These recommendations can improve the systems in our state that are designed to keep children healthy and protected. Many of these recommendations require a long-term commitment to children with funding levels that may not be possible until our state budget picture improves. As we continue our work, we hope this report furthers the awareness and action of state and local officials as well as the citizens of Michigan, on how we can work together to keep kids alive.

Thank you for your continued support in working to make Michigan a safe and healthy place for children.

Sincerely,

Ismael Ahmed

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ACKNOWLEDGEMENTS

We wish to acknowledge the dedication of the over twelve hundred volunteers from throughout Michigan who serve our state and the children of Michigan by serving on Child Death Review Teams. It is an act of courage to acknowledge that the death of a child is a community problem. Their willingness to step outside of their traditional professional roles, and examine all of the circumstances that lead to child deaths, and to seriously consider ways to prevent other deaths, has made this report possible.

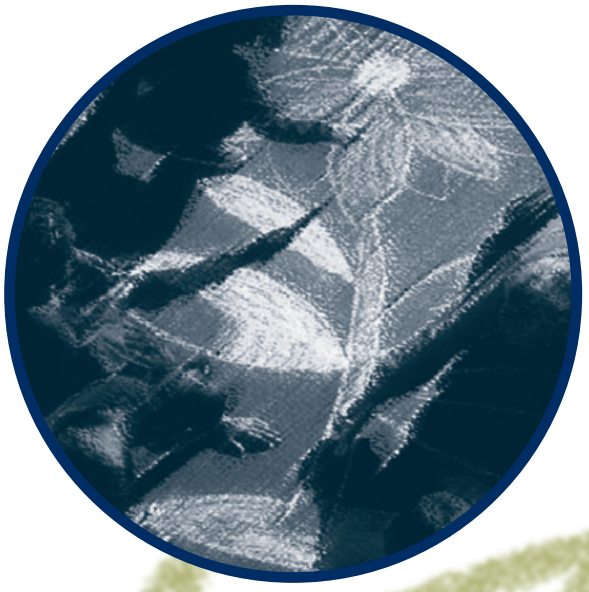
Many thanks to the local Child Death Review Team Coordinators for volunteering their time to organize, facilitate and report on the findings of their reviews. Because of their commitment to the child death review process, this annual report is published.

The Michigan Department of Community Health, Office of the State Registrar, Division for Vital Records and Health Statistics has been especially helpful in providing child mortality data and in helping us to better understand and interpret the statistics on child deaths.

The Michigan Department of Human Services provides the funding and oversight for the Child Death Review program, which is managed by contract with the Michigan Public Health Institute.

This report is also available at **www.michigan.gov/dhs** and **www.keepingkidsalive.org**.

Child Deaths IN MICHIGAN



MICHIGAN CHILD DEATH STATE ADVISORY TEAM

SEVENTH ANNUAL REPORT

A REPORT ON REVIEWS
CONDUCTED IN 2005–2006

MISSION

TO UNDERSTAND **HOW** AND **WHY CHILDREN DIE** IN MICHIGAN,
IN ORDER TO TAKE **ACTION** TO **PREVENT** OTHER **CHILD DEATHS**.

SUBMITTED TO

THE HONORABLE JENNIFER GRANHOLM, GOVERNOR, STATE OF MICHIGAN

THE HONORABLE MIKE BISHOP, MAJORITY LEADER, MICHIGAN STATE SENATE

THE HONORABLE ANDY DILLON, SPEAKER OF THE HOUSE, MICHIGAN HOUSE OF REPRESENTATIVES

Keeping Kids Alive©

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INTRODUCTION

Children are not supposed to die. The death of a child is a profound loss not only to the child's parents and family, but also to the larger community. In order to reduce the numbers of these tragic losses, we must first understand how and why our children are dying.

The Child Death Review (CDR) process was implemented in Michigan in 1995 to conduct in-depth reviews of child deaths. Multidisciplinary teams of local community members identify the factors that led to the deaths. Core team members include: the county medical examiner's office, the county prosecutor's office, local law enforcement, and representatives from the county health department and Department of Human Services (DHS). Teams may add further membership as necessary, including emergency medical services, physicians, records staff, schools, community mental health, or other service providers. Based on their review findings, teams recommend improvements for local communities to prevent future deaths.

The Michigan Child Death State Advisory Team studies county review team findings. It was authorized by Public Act 167 (P.A. 167) of 1997 to identify and make recommendations on policy and statutory changes pertaining to child fatalities and to guide statewide prevention, education and training efforts. P.A. 167 requires the State Advisory Team to publish an annual report on child fatalities. This annual report covers deaths reviewed in 2005 and 2006, during which time 3,320 children died. Local teams reviewed 1,382 of these child deaths.

SCOPE OF THE DATA

The information provided in this report is based on the data provided by the local county CDR teams (local teams). The local teams complete a standardized data reporting tool developed by the National Center for Child Death Review, and submit the information to the CDR program office at the Michigan Public Health Institute (MPHI). The tool used during this report period was developed with input from many states through their CDR programs. It is more extensive than the tool used previously for CDR reporting in Michigan. The additional variables provide the potential for gathering data not previously collected. This tool can be viewed on the Michigan CDR web site: www.keepingkidsalive.org.

It is important to note that not all child deaths in the state are reviewed. Local teams choose which cases are reviewed, based on the number of deaths that occur, the resources available in the county to conduct reviews, and the team's ability to access case information. The most populous counties in the state typically must limit their reviews to those cases that fall under the jurisdiction of the county medical examiner, which are primarily non-natural deaths. This is due to these cases being generally regarded as more preventable, and information on them is more readily available to the local teams.

The CDR data provided in this report does not account for every child death in the state, but rather assists in the identification of emerging issues, problematic trends and key risk factors that can be used to prevent future deaths. Those interested in additional information not presented in this report should contact MPHI at keepingkidsalive@mphi.org for specific data requests.

Please note: **in this report, when referring to "deaths reviewed", that data is derived from the local team reviews. When referring to "total deaths", that data is derived from official mortality statistics for the state, which are based on death certificates, and obtained from the Division for Vital Records and Health Statistics at the Michigan Department of Community Health.**

In pie charts, individual percentages may not equal the total percentage due to rounding.

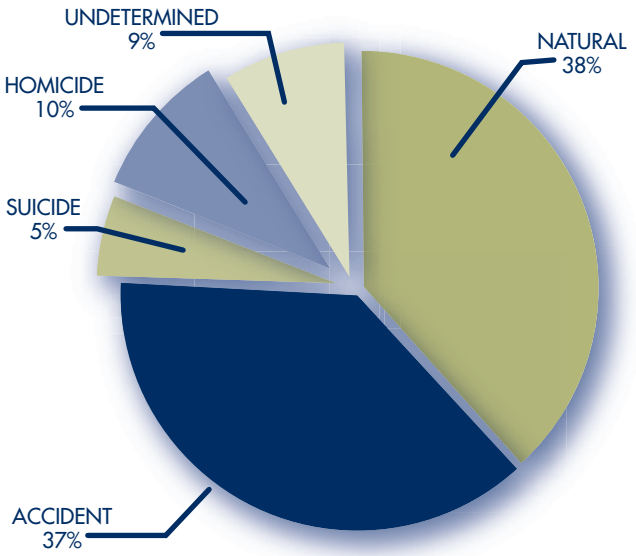
CHILD DEATH REVIEW DATA OVERVIEW

There are two types of death determination that are reported on death certificates: Cause and Manner. Cause refers to the actual disease, injury or complications that directly resulted in the death. Manner refers to the circumstances of the death. There are five possible manners: Natural, Accident, Suicide, Homicide or Undetermined. Within each of the five manners of death, there may be many different causes of death. For example, natural deaths may include causes such as cancer, birth defects and prematurity, while homicides may include causes such as blunt force trauma or multiple gunshot wounds.

The largest portion (72 percent) of the total child deaths in the state for 2005-2006 were natural deaths. Accidental deaths, including, but not limited to deaths from fires, drownings, car crashes, and suffocations were next (19 percent).

Local teams reviewed 1,382 deaths in 2005 and 2006. Natural and accidental deaths were 38 and 37 percent respectively. This is in line with the percentages of total child deaths in the state. The difference in percentages between total deaths and reviewed deaths is due to the fact that the most populous counties in Michigan review very few natural deaths, while reviewing most of their accidental deaths.

Percentage of Deaths Reviewed in 2005 & 2006 by Manner

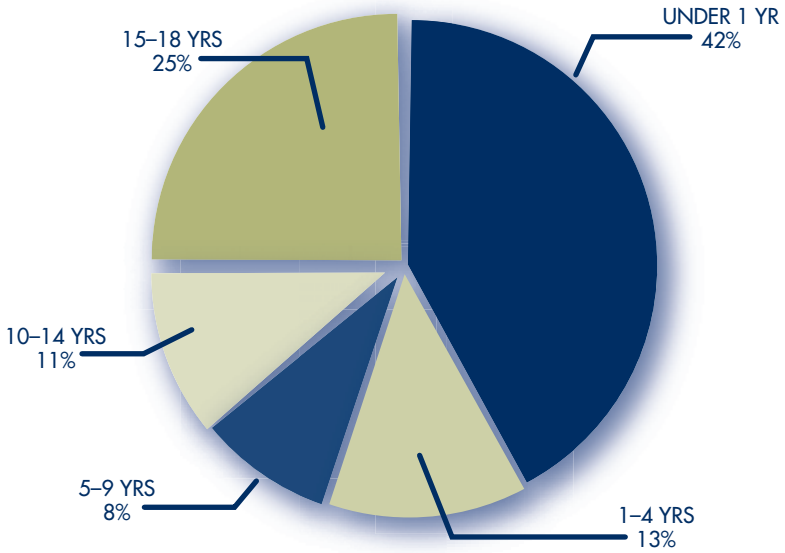


Data Source: Michigan Child Death Review

From 2005-2006, 59 percent of the total Michigan child deaths ages 0-18 were infants. Each year, 80-85 percent of infant deaths are due to natural causes. In 2005 and 2006, local teams similarly reviewed deaths to children under the age of one most frequently, with 42 percent of all cases reviewed.

The deaths of children 15–18 years of age are reviewed at a higher rate than other ages due to the fact that these deaths contain a higher percentage of accidents, homicides and suicides than do other age groups. Because these fall under the jurisdiction of medical examiners, they are reviewed more frequently than natural deaths.

Percentage of Deaths Reviewed in 2005 & 2006 by Age

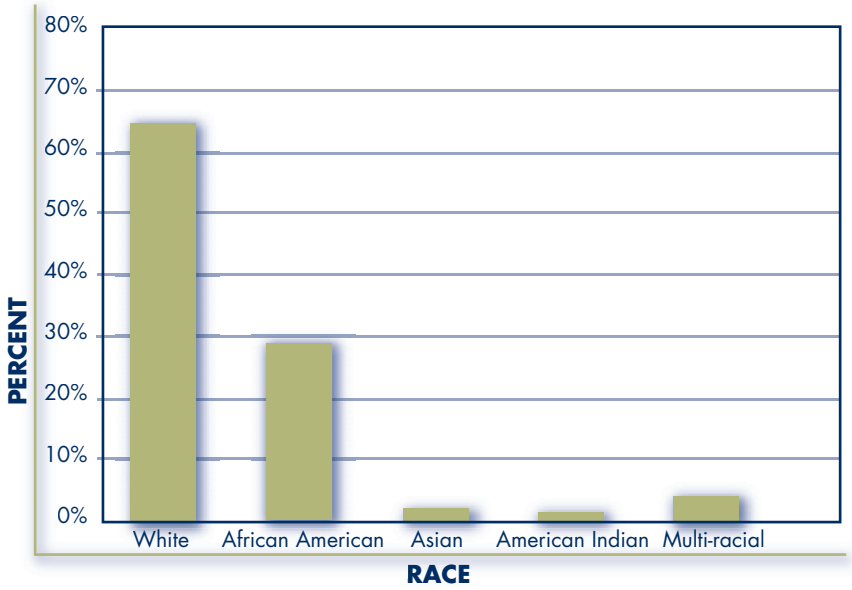


Data Source: Michigan Child Death Review

African Americans make up about 18.5 percent of the child population in Michigan, but accounted for 34 percent of the total child deaths in Michigan, and over 25 percent of the child deaths reviewed in 2005-2006. This finding remains consistent throughout the years.

Note: Hispanic origin is an ethnicity, not a race. In this analysis, hispanics are included within the various race categories.

Percentage of Deaths Reviewed in 2005 & 2006 by Race



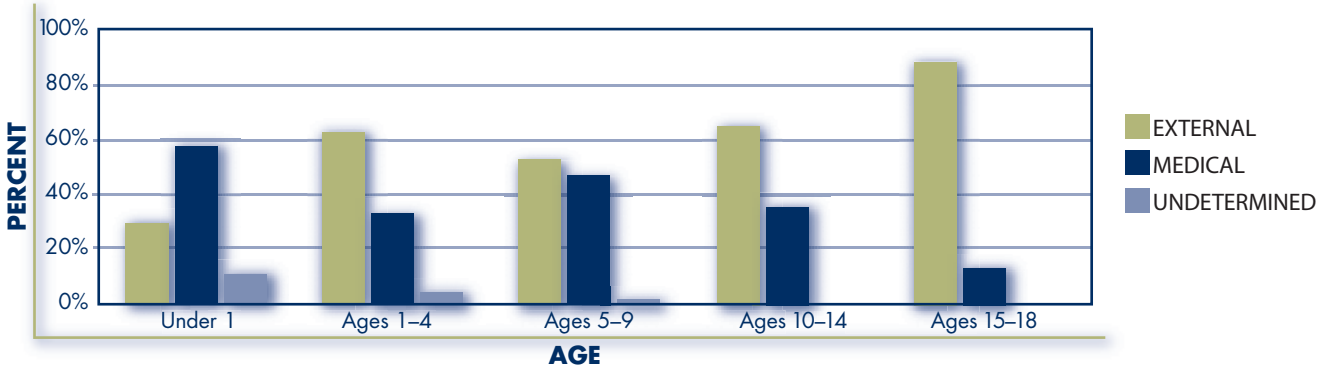
Data Source: Michigan Child Death Review

The primary causes of death for children under the age of one are medical. For all age ranges greater than one, the primary cause of death changes from medical to external causes. It remains this way throughout childhood, with the most marked increase occurring when children reach the age of 15.

Causes of death can be broken down into three categories:

- External – injury deaths, such as accidents, homicides and suicides
- Medical – natural deaths due to disease
- Undetermined whether external or medical.

Percentage of Deaths Reviewed in 2005 & 2006 by Age and Type of Cause



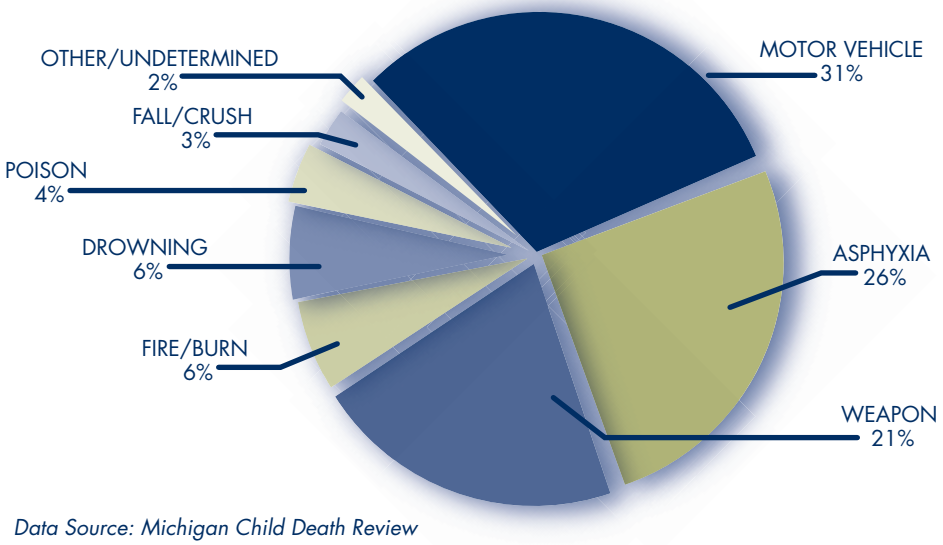
Data Source: Michigan Child Death Review

External Causes

Motor vehicle deaths make up the largest portion of external cause deaths reviewed, followed by asphyxia (suffocation). Asphyxial deaths include accidental suffocation of infants in unsafe sleep environments, as well as other types of accidental or homicidal strangulation, choking, and suicide by hanging. Of the143 *accidental* asphyxias reviewed, 87 percent were sleep-related infant deaths.

It should be noted that deaths as a result of any type of physical abuse are contained within the weapon category. For reporting purposes, the"weapon" used in physical abuse deaths is often the perpetrator's body part involved in the abuse (fist, foot, etc).

Percentage of External (Injury) Deaths Reviewed in 2005 & 2006 by Cause



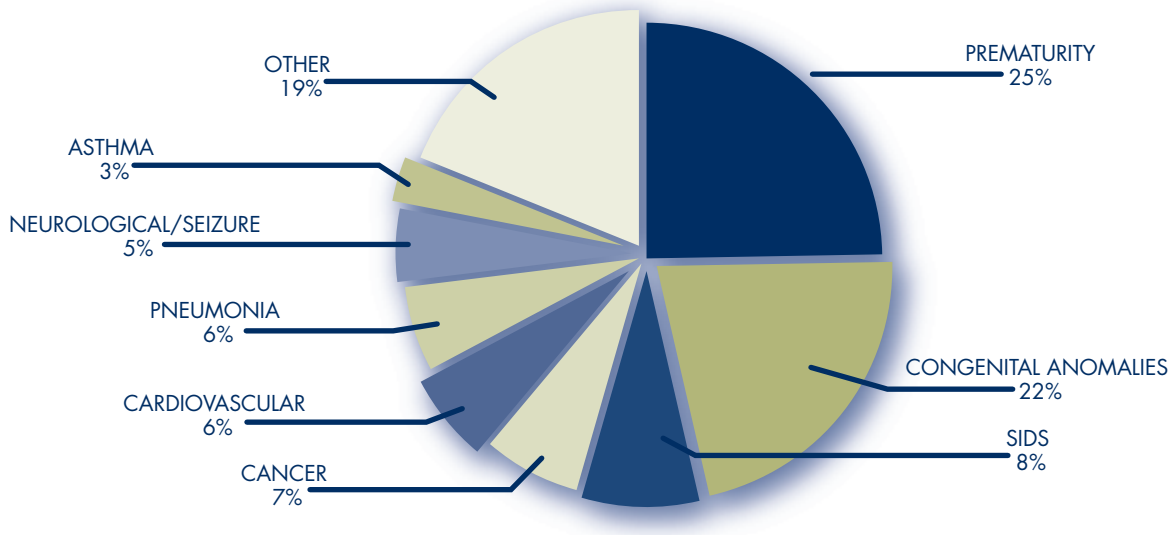
Data Source: Michigan Child Death Review

Medical Causes

Infant mortality due to prematurity (birth at less than 37 weeks gestation) and congenital anomalies (birth defects) account for roughly half of all medical cause deaths reviewed from 2005-2006. The continuing problem of high infant mortality in Michigan is looked at in more detail in the section highlighting Fetal Infant Mortality Review located at the end of this report.

The use of the term Sudden Infant Death Syndrome (SIDS) has been declining over the years due to a shift away from this diagnosis. Those cases that were diagnosed as SIDS in 2005 and 2006 are included here, because they are considered natural in manner. Currently, more sudden and unexpected infant deaths (SUID) in sleep environments are being diagnosed as accidental asphyxias or undetermined by medical examiners. The problem of sleep-related infant deaths is also explored specifically later in this report.

Percentage of Medical Deaths Reviewed in 2005 & 2006 by Cause



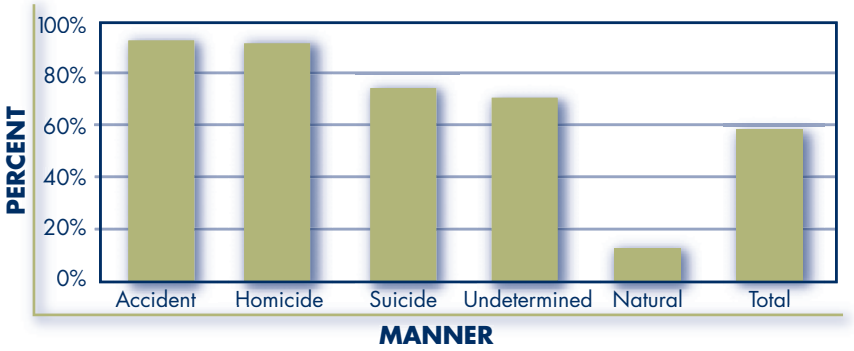
Data Source: Michigan Child Death Review

Preventability

Local teams define a child's death as preventable "if the community or an individual could reasonably have changed the circumstances that led to the death," *and they decide if each case meets this criterion. Nearly all deaths with a manner of accident or homicide were determined to be preventable by the local teams, using this standard.

The large percentage of preventable deaths reviewed with a manner of undetermined is due in part to the number of sleep related infant deaths that are being assigned cause and manner of undetermined by medical examiners. Local teams consider specific risk factors such as unsafe sleep environments when making their preventability determinations.

Percentage of Preventable Deaths Reviewed in 2005 & 2006 by Manner

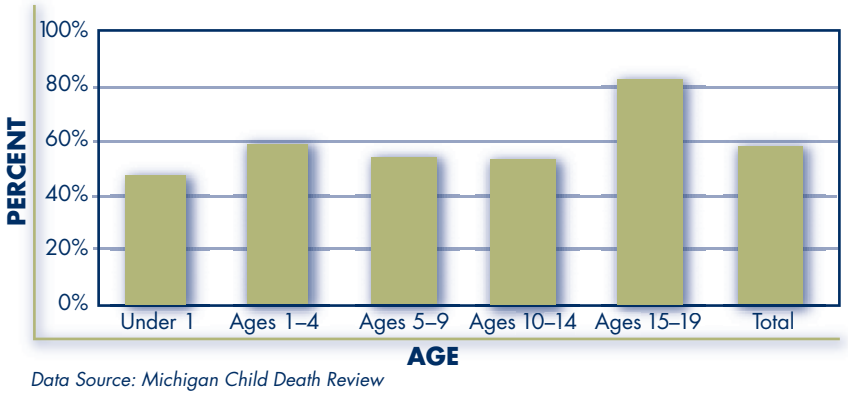


Data Source: Michigan Child Death Review

Local teams consider teen deaths as more preventable than deaths to children of other ages, in part because the majority of teen deaths are due to external causes such as accidents, homicides and suicides.

The deaths considered the least preventable by local teams are those within the perinatal period (the first 28 days of life). The majority of these deaths continue to be the result of infants being born prematurely or with congenital anomalies, and make up a large portion of all deaths under age one.

Percentage of Preventable Deaths Reviewed in 2005 & 2006 by Age



Data Source: Michigan Child Death Review

*National Center for Child Death Review Case Report Data Dictionary, January 2008.

SELECTED CAUSES OF DEATH AND RECOMMENDATIONS FOR POLICYMAKERS

This section of the report addresses causes of child death that were of particular concern to local review teams in 2005 and 2006:

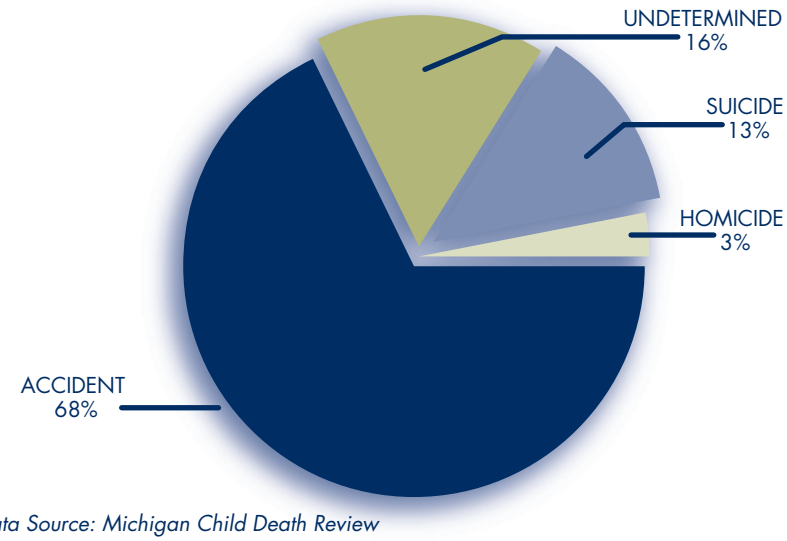
- Poisonings/Overdoses/Acute Intoxications
- Motor vehicle deaths
- Sleep-related infant deaths
- Child abuse and neglect deaths

Poisonings/Overdoses/Acute Intoxications

For the purposes of CDR reporting, poisoning occurs when a substance not meant for human consumption is ingested and causes death; overdose is when a substance for which a safe dosage has been established (pain medications and other types of prescription drugs) is ingested in excess and causes death; and acute intoxication is when a substance for which no safe dosage has been established (cocaine and other types of illegal drugs) is ingested and causes death.

Local teams have reviewed an increasing number of teen deaths resulting from overdoses or acute intoxications. The greatest portion of all poisonings/overdoses/acute intoxications reviewed in 2005 and 2006 were accidental. In some cases, the medical examiner was unable to determine whether a teen's overdose was suicidal or accidental; those deaths are given a manner of undetermined.

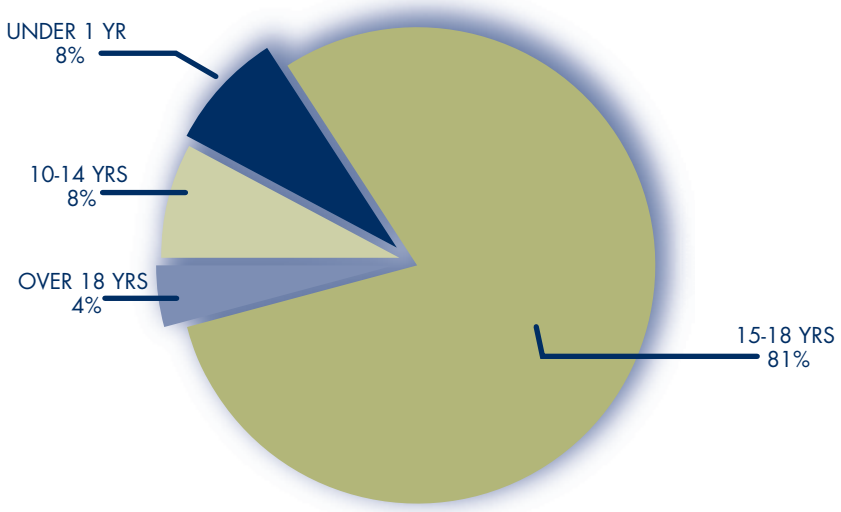
Percentage of Poisoning, Overdose, or Acute Intoxication Deaths Reviewed in 2005 & 2006 by Manner



Data Source: Michigan Child Death Review

Teens were the most frequent victims of the accidental deaths reviewed in this category. These deaths were most often caused by the use of one or more prescription or illegal drugs. Alcohol is often involved as well and can increase the risk of overdose.

Percentage of Accidental Poisoning, Overdose, or Acute Intoxication Deaths Reviewed in 2005 & 2006 by Age



Data Source: Michigan Child Death Review

The number of accidental teen overdose deaths, especially involving prescription drugs, has increased over the past several years. There was an average of five such deaths per year in Michigan from 1999-2003.Over the next three years (2004-2006), that average more than doubled to 12 per year.

Teen males were overwhelmingly represented in the accidental overdoses/acute intoxication deaths reviewed, comprising 92 percent of all victims.

Recommendations to Policy Makers Regarding Poisonings/Overdoses/Acute Intoxication Deaths:

1. Michigan Department of Education: Encourage school districts to include in middle and high school parent orientations, information regarding the potential for overdose when teens have access to prescription medications not prescribed for them.

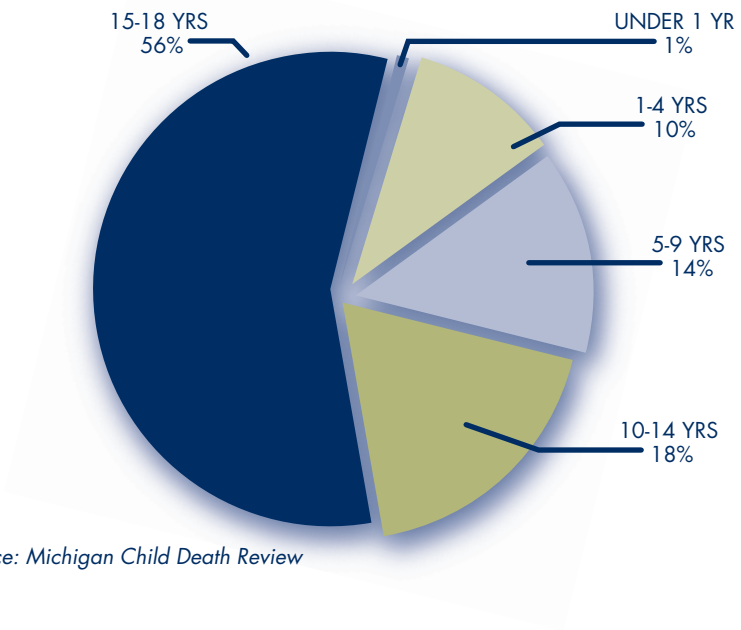
2. Michigan Departments of Community Health, Human Services, and Education; law enforcement agencies; local Community Mental Health agencies and other human service agencies that work with teens and their families: Target youth substance abuse prevention campaigns to males, including information about the risk of death from abusing prescription drugs.

Motor Vehicle Deaths

New teen drivers are at very high risk for causing motor vehicle crashes. According to the National Highway Traffic Safety Administration website, teenagers are involved in three times as many fatal crashes as are all drivers. This is attributed in part to teens' inexperience behind the wheel and increased likelihood of risk-taking behavior. The risk increases with each additional teen passenger in the vehicle.

The total number of child deaths reviewed involving motor vehicles was 227 in 2005 and 2006. Males have been and continue to be overrepresented in motor vehicle fatalities reviewed. Sixty-one percent of the motor vehicle deaths reviewed during the report period were male victims.

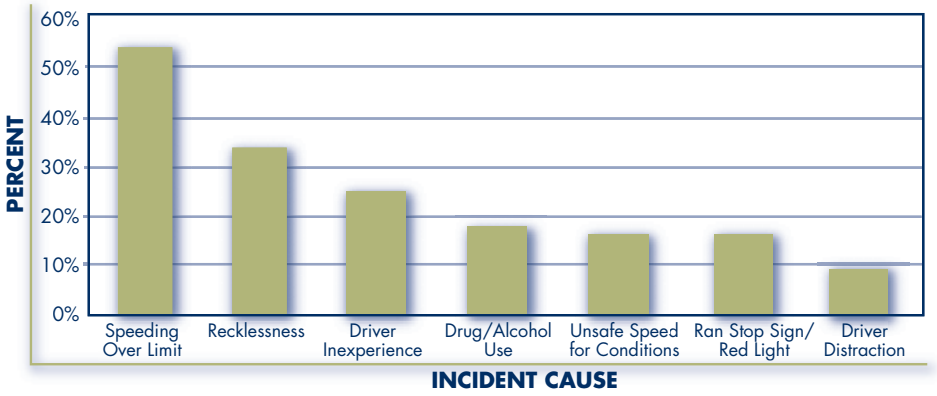
Percentage of Motor Vehicle Deaths Reviewed in 2005 & 2006 by Age



Data Source: Michigan Child Death Review

Local teams can choose as many causes of the incident as applicable when reporting on crashes. Approximately half of the motor vehicle deaths reviewed in which a teen was responsible for the crash listed speeding as at least one of the causes (53 percent). While drug or alcohol use was considered a factor in 18 percent of the fatal teen crashes, teams were more likely to cite driver inexperience, recklessness and/or speeding as a cause of the crash. Exact numbers of teen deaths due to distracted driving are unknown, because in many cases, the victim was the driver and sole occupant of the vehicle at the time of the crash.

Percentage of Teen Motor Vehicle Deaths Reviewed in 2005 & 2006 by Cause of Incident*



Data Source: Michigan Child Death Review

*Graph only inlcudes deaths in which teen drivers were responsible for incident.

Recommendations to Policy Makers Regarding Motor Vehicle Deaths:

1. The Michigan Legislature: Amend the current graduated licensing law to place limits on the number of teen passengers allowed in vehicles driven by teens with Level Two Intermediate Licenses. This limitation should apply at all times of day, and without exception.
2. The Michigan Department of State: Partner with the Office of Highway Safety Planning to conduct a comprehensive review and revision of public and private driver education programs throughout the state to ensure that the instructors and curricula meet minimum requirements.

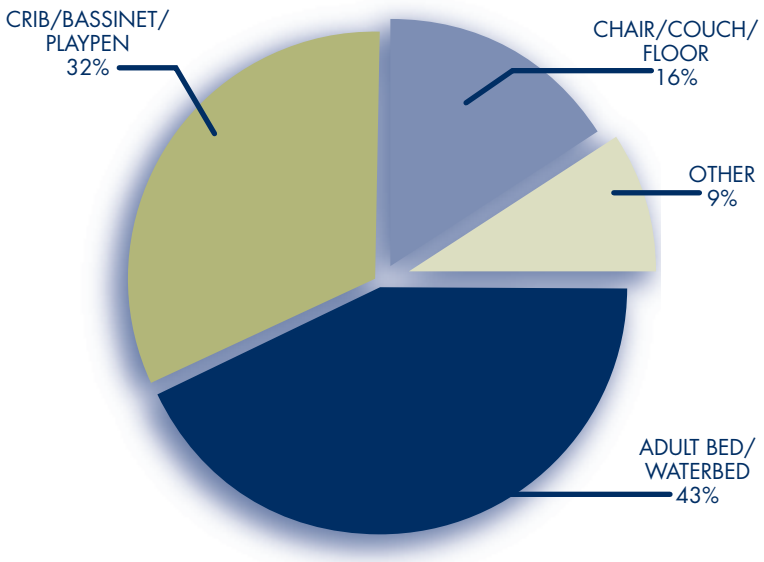
Sleep-Related Infant Deaths

The nationally recognized definition of SIDS is the death of an infant under one year of age which remains unexplained after a thorough autopsy, review of the medical history and death scene investigation have been conducted. During the past several decades, the diagnosis of Sudden Infant Death Syndrome (SIDS) was usually made in cases of sudden and unexpected infant death in sleep environments when the autopsies and medical histories found no medical cause, and often without careful examination of the death scene. In the past ten years, there has been a national effort to improve the quality of death scene investigations in these cases. As a result, better information is available on the circumstances surrounding these types of deaths and on the sleep environments.

The graphs in this section include deaths designated as: SIDS, positional asphyxia, and undetermined/ sudden unexpected infant death in a sleep environment. The percentages are based on 272 such deaths reviewed in 2005 and 2006. Since 1995, local teams have reviewed over 1,000 sudden deaths of infants occurring in sleep environments.

The American Academy of Pediatrics (AAP) has defined a safe infant sleep environment to be a safety-approved crib, bassinet or portable crib with a firm mattress and a tight-fitting sheet. During the report period, 32 percent of the infant victims of sleep-related death reviewed were reported to be in an AAP safe infant sleep environment at the time of death. The remaining victims were sleeping in locations considered to be unsafe for infants. In 43 percent of the deaths reviewed, the infant died after being placed on an adult bed to sleep.

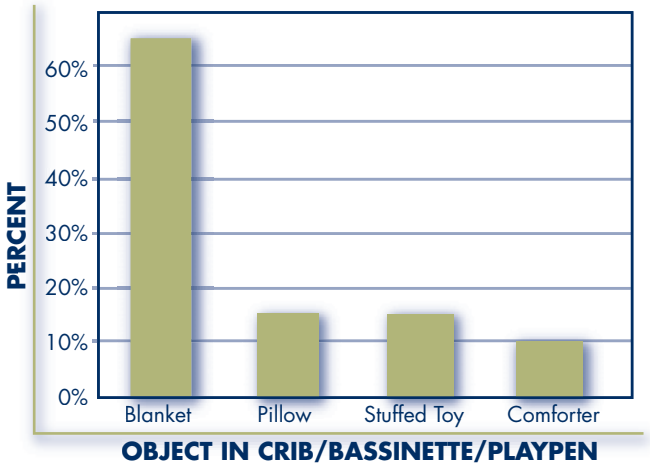
Percentage of Infant Sleep-Related Deaths Reviewed in 2005 & 2006 by Incident Sleep Place



Data Source: Michigan Child Death Review

Of the sleep-related infant deaths reviewed that occurred in a safe infant sleep location, many involved unsafe items in the immediate environment. In 65 percent of the cases reviewed in 2005 and 2006, blankets were present in the crib, bassinet or playpen at the time of the death. According to the AAP, loose blankets, pillows, comforters and stuffed toys should **not** be present in the infant's sleep environment. The items shown in this graph are not mutually exclusive; in some cases, the infants had more than one of the unsafe items in his/her crib at the time of death.

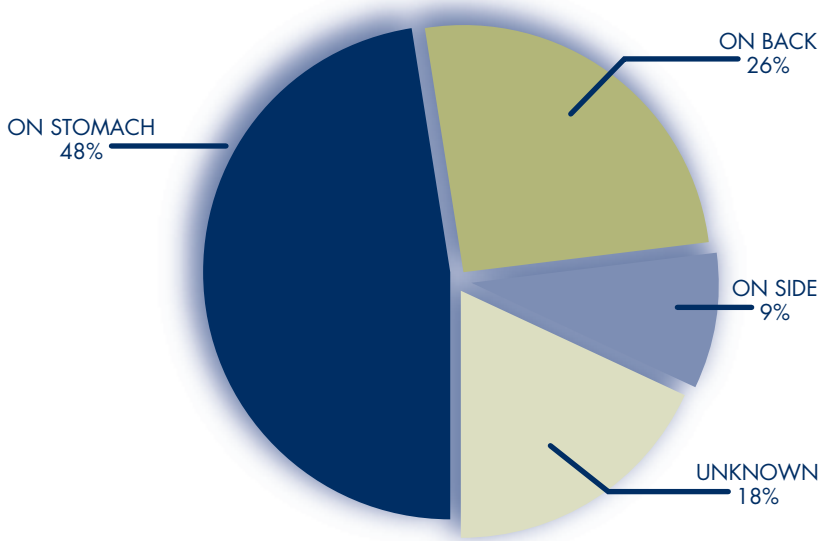
Percentage of Sleep-Related Deaths Reviewed in 2005 & 2006 in Crib, Bassinet or Playpen, by Objects in Sleep Environment



Data Source: Michigan Child Death Review

According to the AAP, infants should always be placed to sleep on their backs. Infants were reported to have been found unresponsive on their backs in less than 30 percent of the sleep-related deaths reviewed in 2005 and 2006. In nearly 20 percent of the cases, local teams did not have information about the position in which the infant was found unresponsive. More complete information collected at the death scene, including doll re-enactment of the exact position of the infant when found, gives the medical examiner a clearer picture of how and why infants are dying.

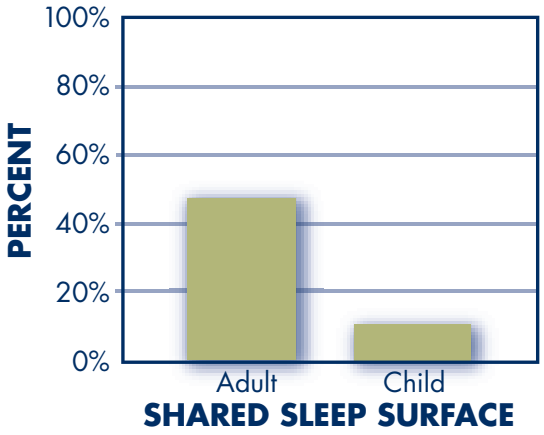
Percentage of Sleep-Related Deaths Reviewed in 2005 & 2006 by Found Position



Data Source: Michigan Child Death Review

The AAP recommends a separate sleep surface for infants. In 2005-2006, there were 125 sleep-related deaths reviewed where the infant was sleeping with at least one adult at the time of death, and 29 were sleeping with at least one other child. Since these categories are not mutually exclusive, some infants may have been sleeping with both adults and other children at the time of their deaths.

Percentage of Sleep-Related Deaths Reviewed in 2005 & 2006 by Shared Sleep Surface



Data Source: Michigan Child Death Review

Recommendations to Policy Makers Regarding Sleep-Related Infant Deaths:

1. The medical examiner, prosecuting attorney, and law enforcement agencies in every county: jointly ensure that PA 179 is followed, by using the *State of Michigan Sudden & Unexplained Child Death Scene Investigation Form* for every sudden and unexpected death of a child under age two.

2. All state human service agencies: Assess internal policies, practices and materials regarding safe infant sleep, so that the public receives standardized messages on this topic. Continue to enhance resources for infant safe sleep initiatives and maintain the institutionalization of the statewide infant safe sleep campaign, consistent with the recommendations of the American Academy of Pediatrics.

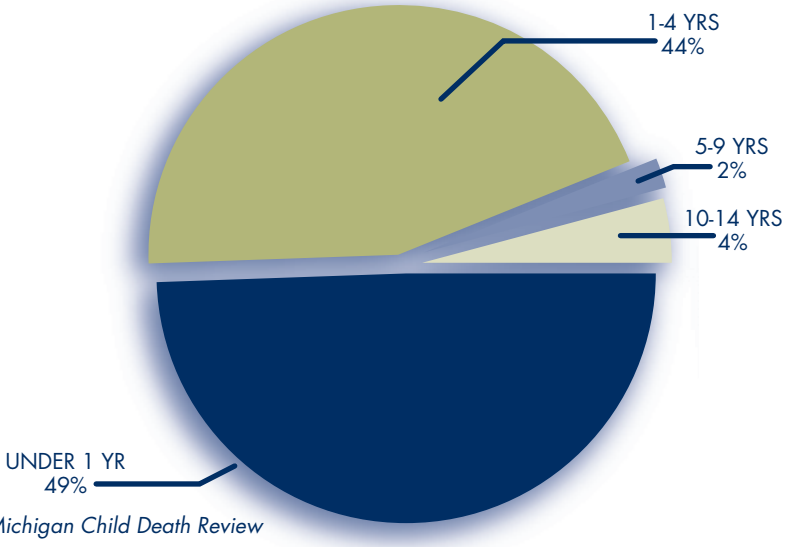
3. The Michigan Chapter of the American Academy of Pediatrics: Identify a partner with whom to host a "Train the Trainer" event for pediatricians and obstetricians around the state, in order to ensure the dissemination of consistent safe infant sleep messages to new parents.

Child Abuse and Neglect Deaths

Identification of deaths due to child abuse and neglect presents unique challenges. A study published in Pediatrics (2002) that reviewed nine years of children's death certificates estimated that about half of child abuse and neglect deaths were not coded consistently on death certificates. The Centers for Disease Control and Prevention (CDC) have funded state-level surveillance projects which have shown that local teams are the most accurate way to identify deaths due to child abuse and neglect.*

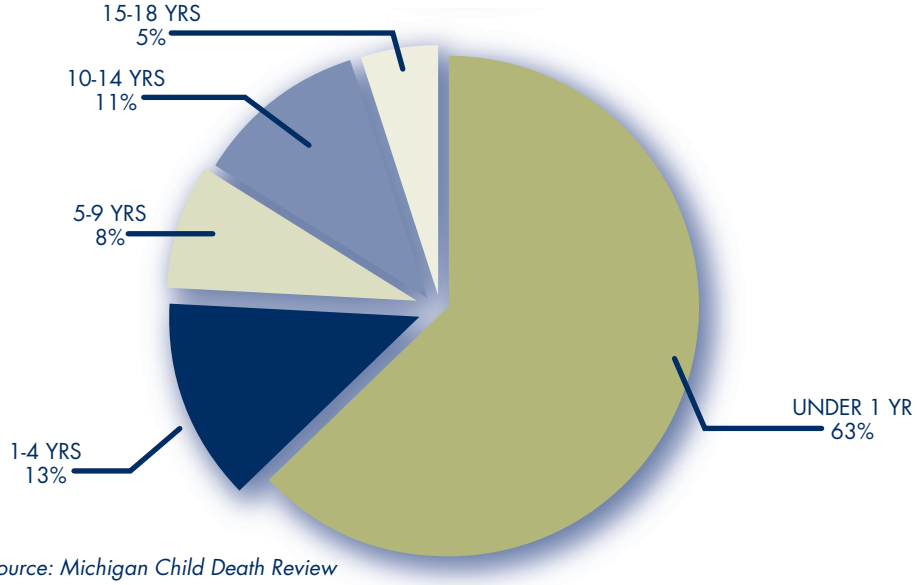
The percentages of child abuse and neglect deaths reported in the graphs in this section are based on 45 fatal abuse cases and 38 neglect deaths reviewed in 2005 and 2006. For both abuse and neglect fatalities, infants under age one were most at risk, with ages 1-4 also at increased risk of abuse fatality over the other age groups. These findings are consistent with annual national trends.

Percentage of Child Abuse Deaths Reviewed in 2005 & 2006 by Age



Data Source: Michigan Child Death Review

Percentage of Child Neglect Deaths Reviewed in 2005 & 2006 by Age



Data Source: Michigan Child Death Review

*McCurdy J, Wetterhall S, Gibbs D, & Farris T. Child Maltreatment Surveillance: Recommended Model System. CDC, May 22, 2006.

The Child Death State Advisory Team also functions as Michigan's federally mandated Citizen Review Panel (CRP) on Child Fatalities. The CRP meets quarterly to examine deaths to children who were involved in the child protection system. This examination is a specialized, multi-step process that involves the identification of cases with the assistance of the Department of Human Services, the collection of relevant materials and a thorough case review. The CRP has identified a range of findings and recommendations over the 2005–2006 reporting period.

Recommendations to Policy Makers Regarding Child Abuse and Neglect Deaths:

1. The Michigan Departments of Human Services, Community Health and Education: Ensure that human service professionals working with high-risk families are knowledgeable about available resources for families, such as the Maternal Infant Health Program and other state and community-based primary and secondary prevention services.

2. Michigan Department of Human Services: In conjunction with the finalization of the revised state model coordinated investigative protocol, develop support resources that will enable counties to maintain knowledge of and adherence to their county's version of this protocol.

3. Michigan Department of Education: Continuously encourage school officials to be trained on the signs and symptoms of child neglect, as well as on their duty to report any suspicions of abuse or neglect.

4. Michigan Department of Community Health, Bureau of Health Professions: Require training for medical professionals on failure to thrive and other types of medical neglect, as well as on their duty to report any suspicions of abuse or neglect, as part of licensing standards.

5. County Prosecutors: Consider charging mandated reporters who suspect incidents of child abuse or neglect, but fail to report them to the Department of Human Services.

6. Michigan Department of Human Services: Develop guidelines for determining when unsafe infant sleep deaths rise to the level of child abuse or neglect.

FETAL INFANT MORTALITY REVIEW*

Fetal Infant Mortality Review (FIMR) is a process similar to that of Child Death Review (CDR), with some notable differences. FIMR focuses on the deaths of live born infants under the age of one (often due to prematurity and low birth weight) and stillbirths. FIMR is dedicated to the identification and examination of factors that contribute to fetal and infant deaths through the systematic evaluation of individual cases. FIMRs find patterns of need in a community or gaps in care and make recommendations to improve the perinatal health delivery system and resources for women, infants and families. There are three distinct differences between FIMR and CDR:

1. FIMR is a de-identified process. Case preparation and summary work is done up-front by a nurse abstractor who has access to maternal and infant health records. However, at review, the names of those involved are not used.

2. FIMR staff attempt to do home interviews with all mothers who have experienced a loss, conveying the mother's story and her encounters with the health care system (qualitative data).

3. FIMR is a two-tiered process.

    1) The Case Review Teams are multi-disciplinary, (much like the CDR teams), who review the summary of the case information and the home interview. They identify issues on individual cases, look at trends over time, and make recommendations for community change.

    2) The Community Action Team is a diverse group of community leaders, advocates and consumers who receive the recommendations of the review team, prioritize issues, then design and implement interventions to improve service systems and resources.

The State Support program for FIMR provides technical assistance to local communities and coordination of team activities, including team organization; hands-on skills for abstracting, interviewing and conducting team meetings; moving recommendations to action; resources on best practices in prevention; and link with other child health, safety, and protection sources. Program support materials include standard case abstraction forms and Access database, state developed Maternal Home Interview guide, Standard issues summary form with standard state developed definitions, and a program coordinator's manual.

**This section of the report was authored by Rosemary Fournier, for the Michigan Department of Community Health.*

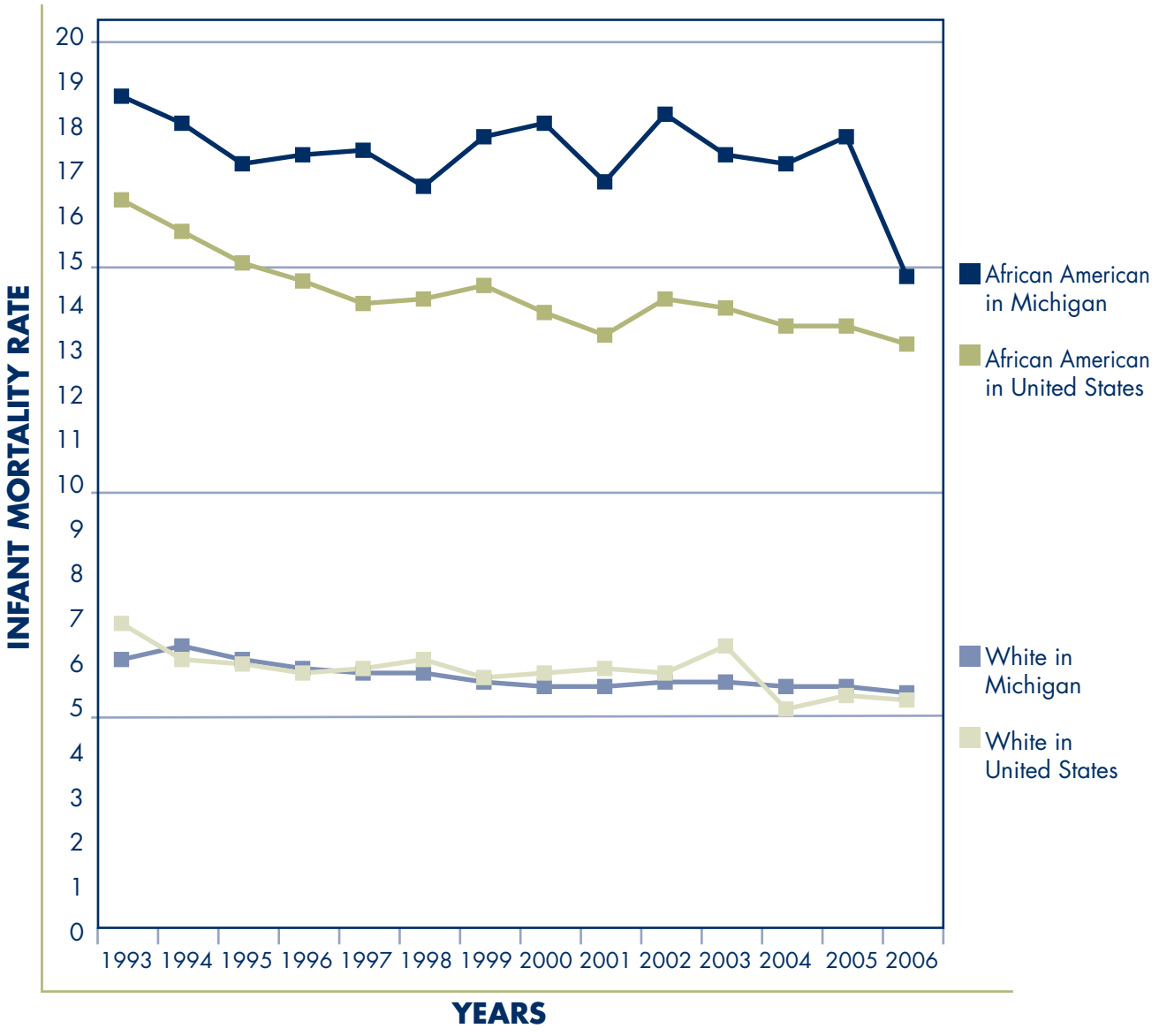
Scope of the Problem

Infant mortality (IM) continues to be higher for Michigan than for the rest of the United States. In 2005, 1,013 infants died under the age of one year. In 2006, 940 infants died, resulting in an IM rate of 7.4 per 1,000 live births, compared to the US rate of 6.7. This represents 58 percent of all Michigan child deaths, ages 0-18.

Disparities exist between the African American and white IM rates in Michigan. In 2006, the white infant mortality rate was 5.4 per 1,000 live births while the African American rate was 14.8. In 2005, an even greater disparity existed, with an African American rate of 17.9 compared to 5.4 for the white rate. Michigan's African American infants are dying at a rate of about three times that of their white counterparts.

Fetal deaths, or stillbirths (infants born without signs of life), are reportable in Michigan if the fetus reached 20 weeks gestation or weighed 400 grams. In 2006, there were 751 fetal deaths registered, for a rate of 5.9 per 1,000 live births.

Race Specific Infant Mortality Rate — Michigan Compared to US



Status of Local FIMR Teams

In 2005 and 2006, 14 FIMR teams existed in Michigan communities, which accounted for approximately 70 percent of the infant deaths statewide, and nearly 96 percent of the African American infant deaths in the state.

During this two-year report period, local teams held 219 Community Review meetings, and reviewed a total of 528 cases. Home interviews were conducted in 113 of those.

COUNTY	YEAR BEGUN	# OF CASES, 2005	# OF CASES, 2006
Saginaw	1991	31	37
Kalamazoo	1998	30	21
Genesee	1999	15	22
Oakland	2000	31	29
Calhoun	1991–1994 resumed in 2000	25	14
Kent	2001	25	35
City of Detroit	2001	19	20
Branch	2001	5	2
Jackson	2003	18	21
Berrien	2003	16	18
Washtenaw	2003	14	22
Native American*	2003	4	1
Wayne County	2005	6	19
Macomb	2005	0	3
Ingham	2003–2004 resumed late 2006	0	0

**The Inter-Tribal Council reviews deaths to native babies regardless of county of residence.*

Examples of Local Initiatives Resulting from FIMRs

Branch — FIMR personnel partnered with the Child Abuse and Neglect Council to distribute parenting information to new moms through the hospital and Women, Infants and Children (WIC) clinics.

Genesee — Perinatal substance use interventions included hosting a perinatal addiction specialist to educate the medical and provider community, enhanced screening and assessment of women in prenatal care for substance use, and intensive case management and referrals to treatment and counseling options for those who screen positive.

Jackson — A March of Dimes grant allowed FIMR personnel to create and implement an intense prenatal smoking cessation program. The program's highlight was the supportive counseling approach, using motivation, confidence level, identifying stressors and triggers, recognizing barriers and strengths, providing education and goals and setting a quit date.

Kalamazoo — FIMR staff worked with local emergency departments on a protocol to add a screening of all pregnant women who visit the department. If they are not in prenatal care, they are referred to a hospital social worker for a provider and resources.

Kent — FIMR personnel encouraged prenatal care providers to discuss family planning through the creation of prenatal care core concepts and provided referral information for providers in the "Pregnancy Resource Guide" (via web-based: www.healthykent.org, and hard copy).

Oakland (Southfield) — After learning that many women lacked information on prenatal care and community resources, the team partnered with Star Theaters to have short clips with prenatal health care information run prior to film showings.

Saginaw — One of the longest continually operating FIMRs in the country, Saginaw's FIMR and health department personnel developed "Sister Friend" - a volunteer program to mentor pregnant girls for one year. After training, the volunteer mentor meets with the girl face-to-face one time, then telephones at least twice a month to offer support and monitor her needs.

The State Support program for FIMR provides technical assistance to local communities and coordination of team activities, resources on best practices in prevention, and links with other child health, safety and protection sources. For more information about Michigan's FIMR program, contact Rosemary Fournier, at fournierr1@michigan.gov.

APPENDIX

Total Numbers of Resident Child Deaths vs Number of Reviews by County, 2005 and 2006

COUNTY	TOTAL DEATHS* 2005	REVIEWS** 2005	TOTAL DEATHS* 2006	REVIEWS** 2006
Alcona	6	1	1	0
Alger	0	0	1	2
Allegan	22	19	15	8
Alpena	2	0	7	0
Antrim	3	1	4	0
Arenac	2	2	1	1
Baraga	2	0	0	0
Barry	8	10	11	10
Bay	21	0	19	19
Benzie	3	2	4	0
Berrien	29	28	23	17
Branch	10	0	6	1
Calhoun	32	10	7	14
Cass	13	15	3	8
Charlevoix	3	2	3	0
Cheboygan	3	6	5	0
Chippewa	7	0	6	0
Clare	2	3	5	0
Clinton	6	9	4	0
Crawford	0	0	7	0
Delta	3	0	1	2
Dickinson	5	3	7	4
Eaton	14	8	11	3
Emmet	4	2	0	1
Genesee	90	39	97	39
Gladwin	9	8	0	1
Gogebic	1	0	4	4
Grand Traverse	11	19	14	8
Gratiot	6	10	8	3
Hillsdale	5	10	9	0
Houghton	4	0	2	0
Huron	4	3	7	8
Ingham	46	17	34	2
Ionia	4	4	11	1
Iosco	3	3	3	4
Iron	1	0	1	0
Isabella	11	8	11	10
Jackson	30	5	18	10

continued

COUNTY	TOTAL DEATHS* 2005	REVIEWS** 2005	TOTAL DEATHS* 2006	REVIEWS** 2006
Kalamazoo	41	25	30	19
Kalkaska	4	11	3	1
Kent	105	74	118	53
Keweenaw	0	0	1	0
Lake	4	2	3	0
Lapeer	14	17	14	9
Leelanau	4	2	0	0
Lenawee	12	0	19	0
Livingston	19	6	16	10
Luce	2	1	2	1
Mackinac	2	0	3	0
Macomb	99	12	92	21
Manistee	6	7	2	10
Marquette	7	4	6	1
Mason	2	0	8	0
Mecosta	3	1	8	0
Menominee	2	0	2	0
Midland	12	7	11	4
Missaukee	2	2	2	3
Monroe	20	32	20	17
Montcalm	7	7	10	7
Montmorency	1	0	2	0
Muskegon	29	6	17	3
Newaygo	9	3	10	0
Oakland	171	48	134	28
Oceana	9	4	4	2
Ogemaw	1	0	1	0
Ontonagon	1	0	1	2
Osceola	5	2	5	2
Oscoda	1	0	1	0
Otsego	2	2	4	0
Ottawa	35	10	35	8
Presque Isle	1	0	1	0
Roscommon	4	2	2	0
Saginaw	51	12	40	19
St Clair	28	24	24	17
St Joseph	11	9	19	3
Sanilac	4	1	8	0
Schoolcraft	1	0	2	2
Shiawassee	15	22	10	14
Tuscola	14	2	6	0
Van Buren	25	12	8	9
Washtenaw	43	6	38	14
Wayne	474	149	444	151
Wexford	10	12	9	13
Unk County	1	-	0	-
Total	**1,738**	**783**	**1,582**	**623**

** Source: Michigan Department of Community Health, Division for Vital Records and Health Statistics*

*** Note: number of reviews may exceed number of total deaths in a county for a given year if deaths occurring later in the year were reviewed the following year, or if non-residents were reviewed in the county of incident.*

This report is written in memory of all of the children in Michigan who have died. The Michigan Child Death State Advisory Team issues this report with the hope that it will encourage additional efforts, both in local communities and among our state leaders, to keep every child in Michigan safe and healthy.

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